

With the Author's Contribution
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EVILS RESULTING FROM ROWING:

THEIR CAUSE AND REMEDY.

BY

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Published for the Author by

WYMAN & SONS, LINCOLN'S-INN STEAM PRINTING WORKS,
GREAT QUEEN STREET, LONDON, W.C.

1868.

WYMAN AND SONS, PRINTERS,
GREAT QUEEN STREET, LINCOLN'S INN FIELDS,
LONDON, W.C.

EVILS RESULTING FROM ROWING.

SINCE Froissart's time we have borne the character, which we do not deserve, of taking our pleasure sadly. We do *not* take our pleasure sadly; but we take it gravely and seriously, and more after the manner of rational beings than some of Froissart's countrymen.

Two peculiar features, not found to any extent among other nations, characterize an Englishman's ideas of amusement: the one consisting in a fondness for everything connected with the water, the other in a partiality for all kinds of severe physical exertion. Hence it is not to be wondered at that boating, in its various forms, possesses greater attraction for many than any other species of recreation; nor that rowing is more popular than any other aquatic exercise, since it is attainable by thousands whose means or opportunities do not permit them to indulge in any

other; since it affords a method of gratifying the love of vigorous exertion so firmly implanted in the national disposition; and since it is one of the most, probably the most, healthy exercise by which the bodily frame can be invigorated or recruited. Rowing possesses the great advantage over many other exercises of calling into action nearly all the muscles in the body; it would, indeed, be difficult for the anatomist to point out a single group of muscles in the human frame which is not brought more or less into play in the process of pulling an oar. Considering, moreover, the absolute necessity which exists for its performance in the open air, and its frequent association with complete change of scene, it is no matter for surprise that rowing is becoming more and more a national pastime, one may almost say a national occupation. From the picked crews of Oxford and Cambridge, whose race, attracting larger and larger crowds every year, is rapidly becoming as important an annual festival as the Derby, to the City man who refreshes himself with a pull on the river after the fatigue and confinement of the day, and to the thousands who flock every season to the sea,

to dispel the past year's cares from their mental, the past year's dyspepsia from their bodily systems,—all are more or less concerned in the matter; and those who have at no period of their lives felt any interest in it are in a decided minority.

A somewhat unpleasant state of mind has been occasioned among the boating public—no inconsiderable proportion of our countrymen—by the accounts we have recently heard of the fearful train of evils said to result from their favourite recreation. The subject has lately been taken up by various persons, whose letters and papers in the *Times*, the *Lancet*, and other periodicals, have awakened the attention of many besides those personally interested in the matter. It is unnecessary, in considering the subject, to recapitulate all the attendant horrors, because they have already been tolerably impressed upon the general public through the medium of the public prints; and none of them, so far as I am aware, possesses the charm of novelty for the medical profession, to whom they have all, or nearly all, been known for years.

Carefully avoiding “the falsehood of extremes,” and taking, as far as may be, an

impartial and unprejudiced view of the matter, which, wherever the truth lies, is one of grave importance, inasmuch as it affects the health, the happiness, and the usefulness of numbers of our young men,—of those, too, whose lives, from training and education are likely to be most valuable to society hereafter,—let us see if possible where the mischief really originates.

Little doubt exists in the minds of most medical men that mischief,—sometimes organic and incurable mischief,—does occasionally follow hard rowing; and we know only too well that, important structural change having once taken place in the great organs of life, no power on earth can undo it. In this instance, as in many others which daily come under our notice, not only is prevention better than cure, but the one is comparatively easy, where the other is wellnigh impossible.

The question therefore remains, are these evils unavoidable, or may they by any means be prevented; must we abandon rowing at once and for ever as the only chance of preserving health and life; or is there any way by which men may pull away as heretofore without awakening the alarms of watchful friends, whose anxiety for the

success of the boat which contains a son, or brother, or friend, must, after the revelations we have had, be mingled with still greater anxiety for the safety of his health?

With due respect to the opinion of those who think differently, I opine that the blame is laid far too much on the rowing itself, instead of on defective judgment in the selection, the previous training, and the subsequent management of the men engaged; and I have no hesitation in expressing my conviction that the whole train of evils is entirely preventable, simply by acting in accordance with the dictates of common sense in these particulars. It is most extraordinary that until quite recently the subject of training seems never to have come under the notice of the medical profession; and that, although the evils mentioned have long been known, no efficient means has been taken for their remedy.

It is not difficult to see where the cause of the mischief lies: a man probably of powerful but uneducated physique—uneducated that is in not being accustomed to hard and regular muscular work—is chosen, and, without any adequate inquiry into his previous habits and mode of life, is submitted to a reducing process as in-

jurious as it is absurd and unnecessary, combined with a system of training calculated to cause miserable depression of the spirits, without any compensating advantage to the muscular system; is fed with food which his stomach loathes, is deprived of drink when his whole system is crying out for it, and until the race his existence is literally made a burden to him.

I know of nothing in which a man shows more pluck than in the dogged determination with which he undergoes this unwholesome and disagreeable, I had almost said disgusting, process.

He submits, however, to all his torments in the hope that they will lead to a successful issue, often cheering his flagging spirits by promising himself all sorts of enjoyments when once the race is over. Then comes the race, with whole years, as it seems, of nervous energy compressed into as many minutes, and at its termination the crews present much the appearance which has been described by the various writers on the subject. To use the words of the *Lancet* (in an admirable article on the matter), "The men look utterly exhausted. Their white and sunken features and pallid lips show serious congestion of

the heart and lungs, and the air of weakness and lassitude makes it a marvel how such great exertion should have been so nobly undergone."

But the worst is yet to come. After this violent exertion, the human racer, who has up to this point been almost as carefully looked after as a Derby favourite before the run, becomes of no more interest, so far as his health and condition are concerned, than the same animal going to the knacker's ; he is completely his own master once more, and he often makes a rather imprudent use of his newly-acquired liberty. Having an idea of making up for the restraint he has undergone in training, he is apt to run into all sorts of indulgence. The stomach, which has been hitherto restricted to nearly raw animal food, is now loaded with many dainty meats and choice and varied wines. The lungs and heart, lately so heavily taxed, are now only required to pump enough blood and to suck in enough oxygen to serve the purposes of a comparatively sluggish existence ; whilst the iron muscles, strained almost beyond the limits of human endurance, required now for no more severe exertion than to handle a cane or a croquet mallet, or to drag the body

along in an easy saunter, may grow weak and flabby as they will.

This change is more injurious than the previous system of training, for that—although the system be radically bad—is comparatively a gradual process, whilst this change from exertion to inactivity, from self-restraint to self-indulgence, from an unwholesome dietary to one, under the circumstances, still more unwholesome, is *sudden*.

It must be evident to every practical physician that, even if by these means, a man does not injure his heart or lungs, he is tolerably sure to impair his digestive functions, the true value of which no one ever appreciates until he has lost them.

A short letter appeared in the *Lancet* of 2nd Nov., from Dr. Pidduck, whose observations on the subject are so sensible that I need make no apology for referring to them—the more especially as he mentions some points which I had previously noted myself in relation to this subject. Dr. Pidduck lays much stress upon exhaustion of nervous energy as a source of mischief, and he gives a case which came under his own observation—that of a gentleman whose only ailment consisted in excessive prostration fol-

lowing very slight exertion, and evidently traceable to previous violent exertion in rowing. Such cases are not uncommon—whether the exhaustion proceed from rowing, or from any other kind of severe exertion, bodily or mental. A case which came under my notice some time back illustrates this very clearly.

A man who fancied himself phthisical requested me to examine his chest. I did so, and found not the slightest trace of disease: the action of both lungs and heart was perfect. He was a powerfully built man, and splendidly developed in every way, but he complained of great weakness pervading the whole frame, and of extreme prostration quickly following any slight exertion; he also suffered much from nervousness and depression of spirits. His history was very simple; he had tried to combine hard study with hard rowing—a complete break-up of health had ensued, and he was now trying to undo the mischief which had been done.

When I saw him, he had just returned from spending some time in the Highlands, and had derived benefit from the change, although still suffering from great lassitude and depression.

I explained to him that his was simply a

case of exhausted nervous energy, and that what his system required was *rest*; advised him to go into some healthy part of the south of England for the winter (it was then autumn), live regularly, and take as much *gentle* exercise in the open air as he could without fatigue, at the same time avoiding any severe mental exertion. He did so, and in the course of the following year I was pleased to learn that his health was completely restored.

Dr. Pidduck however seems to think that *all* injurious effects of hard rowing are traceable to this cause. With this view, however, I cannot coincide, any more than I can with that of Dr. Hope, who is of opinion that “there is no cause of heart disease so common as severe exertion in rowing;” and I cannot help thinking that if Dr. Hope had reconsidered his opinion, and gone carefully over the exact history of the cases of heart disease which presented themselves before him, he would have come to the conclusion that not one case in a hundred—nay, in a thousand—is traceable to rowing in any shape or form. Most men have rowed, more or less, at some period of their lives, and a man suffering from heart disease is as likely to have done so at some former time

as any one else; but it would, I think, be scarcely logical to infer, simply from this fact, that the rowing *caused* the heart disease.

To avoid ill effects, great care ought, in the first place, to be taken in the selection of men for training. It is not enough that a man possesses a powerful frame and great muscular strength; it is not enough even that he has been accustomed to a certain amount of physical exertion: inquiry should be made into other particulars. Many men, though very muscular, in good health, and capable of great exertion for a short space of time, cannot keep it up for any lengthened period; this, apparently, not depending upon any deficiency in the powers of respiration, but simply from congenital deficiency in nervous energy. This defect may in some measure be counteracted by very careful and judicious training, but these are seldom the best men.

Before the commencement of training, every man ought certainly to be examined by an intelligent medical man, who may form an opinion as to whether there exist in his constitution the seeds of any disease which may possibly be developed by severe exertion; whether from any delicacy of the

nervous or digestive systems he is likely to break down in training; whether, in short, he appears a suitable man for the purpose.

The man should, in a similar way, be inspected, from time to time, during the training, and even after the race he ought to be for some time under medical supervision.

The previous history of a man should be carefully inquired into: thus it is evident that one who has, either by severe study, by idleness, or by self-indulgence, exhausted his nervous energy, and lessened his powers of endurance, is far less fit than another habituated to temperance and active muscular exertion, even though the former may possess far the finer physique of the two.

If the physical exertion to be undergone is to be successful, and not injurious, all idea of hard study must be laid aside. No man's constitution will supply material for both bodily and mental exertion of a severe kind at the same time, and both body and mind must suffer if it be attempted. This is a point which most physicians have had an opportunity of verifying in their own practice—many, unfortunately, in their own persons. I merely mention it here because men frequently think they can do almost

anything, simply because they have energy enough to attempt it—quite ignoring the fact that a human being, like a steam-engine, is only constructed to work up to a given pressure, and that if either of them is pushed beyond this point the consequences will most assuredly be disastrous.

The ordinary time of preparation for a race is lamentably too short—too short even to be efficient—far too short to be safe, in a sanitary point of view.

“Habitual labour is essential to the production of that quality of muscle which forms a basis for violent and long-continued exertion. Such kind of muscle is not acquired even by weeks of training, and scarcely by regular gymnastics. Time is essential to its development; and as it is but rarely found either in the scholar or the student, in whom its want is too often compensated by the stimulus of pluck and emulation, the nervous and muscular systems being supported temporarily by an effort of the will, leaving them weakened, or permanently injured, when the strain is over.”—*Lancet*, Oct. 19th.

The truth of these remarks is undeniable; their application is obvious. If we are to get the requisite quality of muscle, we must

have not only *hard* work, but *habitual* work—work for a long time before the race, gradually increasing in severity as the bodily powers become more and more inured to it.

The preparation for such an exertion as a University boat-race ought to extend over a considerable period of time, certainly not less than six months, and if possible for longer; not, of course, attempting to keep a man up to the highest training point of which he is capable for so long a time—for that, even if it were possible, would not be desirable—but working him slowly and gradually up to it in time for the greatest exertion required of him, and then, not dropping him from that point suddenly and anyhow, but lowering him, as it were, gradually down, by allowing him to lessen by degrees the amount of daily exercise, and to relax the strictness of his dietary. This last point must of course depend altogether upon a man's own common sense; the chief motive for self-restraint being removed, and the only advantage to be reaped from prolonged self-restraint being the preservation of his health.

With respect to the wretched idea of reducing a man simply to get rid of flesh, it

is almost too absurd to refer to, nor should I do so were it not that the results of such a system cannot fail to be most deplorable. Any moderate amount of extra flesh a man may carry will soon disappear of itself under the combined influence of temperance and active regular exercise; if he is the unfortunate possessor of an immoderate amount, training, in his case, had better not be attempted.

The diet and mode of life of a man in process of training ought to be most carefully regulated; at the same time such regulations should be made as little irksome to him as may be, and both diet and exercise should certainly be varied as much as possible, in order to avoid the depression of spirits, loathing of food, and dislike to exertion which is sure to follow an attempt to maintain a fixed and arbitrary standard.

With regard to *exercise*, the safest rule is to take as much in the course of the day as can be done without exhaustive fatigue, being especially careful to avoid attempting too much at one time, an error which very many fall into, and one certain to be followed by a degree of lassitude and indisposition which causes them to lose much ground. It should be borne in mind that

muscular exercise of all kind is beneficial, and rowing should be varied by walking, running, riding, gymnastics (in moderation), and anything, in fact, calculated to strengthen the muscular system and improve the powers of rapid and effective respiration.

Men, even in high training, do not feel equal to so great an amount of exertion on some days as on others, and this is a fact which should not be lost sight of, adopting, as far as can be done, a medium between urging a jaded frame to unwelcome work, and, on the other hand, entirely giving in to constitutional inertia.

Diet, as I have previously remarked, should be varied—as far as is consistent with physiological principles,—to avoid the distaste for food induced by sameness. Constitutions vary, and the same articles are not assimilated with equal ease by all. The food should be wholesome and nutritious, tolerably plain and properly cooked, and the quantity should certainly be regulated simply by the natural feelings of hunger. An individual in good health is pretty sure to take enough to satisfy the demands of the system, and to make good the waste of the tissues produced by exercise. The meals should be regular, and at moderate intervals,

avoiding either too long fasting or the too rapid succession of meals one upon the other.

The quantity of drink taken should likewise be determined by the natural sensation of thirst; the quality must vary with varying constitutions. Nothing is probably more wholesome than sound malt liquor in moderation, where it agrees with the individual; where it does not, good wine, or wine and water (cold) will be found best. Spirits should be avoided, both on account of the subsequent depression they occasion, and from their tendency to disorder the digestive functions, which are more likely than any other to break down in a training man. Tea and coffee should only be used sparingly, and tobacco should never be used before evening, if at all, and then only in moderation.

As I am not writing a manual of training, I shall make no further observations on diet, merely premising that the avoidance of indigestible articles of food, or such as habitually cause derangement of the digestive functions, need scarcely be impressed upon any sensible man.

Most of the anathemas which have been fulminated against rowing have had re-

ference solely to the University races, but are the evils complained of confined to them? Are the undergraduates of Oxford and Cambridge the only people who suffer from the effects of injudicious rowing? or may individuals who have never had the advantage of a university education expect to injure their constitutions in a similar way? Undoubtedly they do. I venture to affirm that for one university man who has sustained injury in a boat-race, at least a score of his fellow-creatures have received more serious hurt independently of any racing at all.

Who has not seen a bevy of young men, not one of whom, in all probability, has ever handled an oar before, attempting to row?—their frantic tugging, the “crabs” they catch, the way in which they strain and knock themselves about, and the extraordinary gyrations of the boat under such unskilful treatment? Doubtless they enjoy themselves after their peculiar fashion, but they often injure themselves as well. The efforts which an unskilful rower makes are exceedingly severe, and when, as not unfrequently happens, he habitually leads a life of confinement in the unwholesome atmosphere of a town, and only rows when a chance trip to the seaside affords him an

opportunity, his whole muscular system is so weak and flabby, and his respiratory organs so unused to any severe exertion, that the experiment becomes doubly hazardous.

Another way in which mischief is apt to ensue is when, for example, a healthy man, having passed the prime of life, but feeling as strong as ever he did, further exhilarated, perhaps, by the fresh sea-breeze and a hard-earned holiday, fancies himself capable of enduring as much physical exertion as in former years. He attempts it, becomes winded directly as a matter of course, disdains to give in, and perseveres in the task he has so foolishly imposed on himself until he can do no more. What are the results? Far more serious, unfortunately, than they are likely to be in a younger man, even under far more severe exertion. More than one case of aneurism which has come under my own observation originated in this manner.

I well remember meeting a strong, hearty man of my acquaintance, who had been famous in his youth for athletic sports of all kinds; struck with his altered appearance (I had not seen him for two or three years), I anxiously inquired the cause.

His answer was characteristic : “ Well,” said he, “ I had been rather hard worked through the year, and in the autumn I went to the seaside with my boys. My health got better every day, till one afternoon I thought I’d go and have a good pull on the water, and somehow I’ve never been the same man since.”

I never had an opportunity of examining his chest, but can form a tolerable idea of what I should have found had I done so, and I was grieved, but not surprised, to hear of his death a few months afterwards. In this case the “ good pull on the water ” undoubtedly cut off many years from a most valuable life.

The temptation in a seaside trip to *overdo* everything—not rowing only, but walking, eating, &c.—is certainly very great. Under the influence of change of air and scene the valetudinarian feels as though health had all at once returned. He seems, for the time being, to bear a charmed life, and imagines he can stand as great an amount of fatigue and exposure, and digest and assimilate as much food as a man in robust health, a mistake which a delicate or impaired constitution resents, not seldom fatally.

CONCLUSION.

A few remarks, hastily strung together in the intervals of other occupations, require no apology for their incompleteness. Convinced of the truth of the propositions I have advanced, and anxious that all opprobrium should be removed from a recreation which I believe to be as healthy as it is delightful, I should be only too glad to see the important matters I have so briefly and imperfectly touched upon, expounded by some abler hand than mine, and to see the whole system of muscular education regulated more by sound physiological principles, and less by the dicta of vulgar and obsolete empiricism

STOURBRIDGE, *Dec.* 14, 1867.





